

### USAGE

- The XLHJ gear operator is designed for use on butterfly valves, ball valves, and plug valves that utilize high pressure pneumatic actuators for operation.
- The XLHJ is a de-clutchable operator for manually overriding the actuator.

### FEATURES

- Small in volume, light weight, reasonable design and novel pattern.
- There are a range of sizes so the output torque matches the size of the pneumatic actuator and valve.
- There are two keyways 90° apart in the inner hole of the worm gear to allow for easy orientation of the valve.
- The gear operator is filled with special lubricant before leaving the factory. It is sealed after assembly providing dustproof and waterproof function and has a protection grade of IP65.



### ASSEMBLY

The bottom of the gear operator should be connected with the valve and the bracket surface connected with the actuator. The valve stem coupling passes through the inner hole of the worm gear and the square end of the stem matches the square hole of the actuator.

### OPERATION

**AUTOMATIC OPERATION:** During normal operation, the actuator drives the valve open and closed with the worm shaft rotating with the valve. In manual operation, the worm shaft engages the worm gear allowing for the valve and actuator to be rotated by the handwheel.

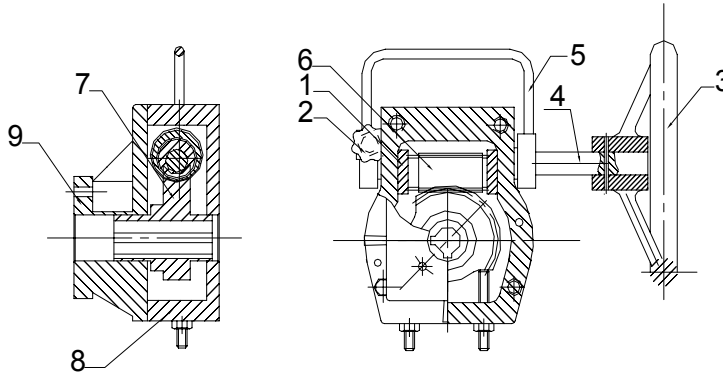
**MANUAL OPERATION:** For manual operation of the valve, there must be no air pressure present in the valve actuator. First, loosen the handle retaining bolt (black knob), then raise the clutch handle so that the handle is in the highest position. This engages the worm rear. The valve may now be operated using the handwheel. After manual operation, place the gear operator back into its normal state by loosening the retaining bolt and lowering the clutch handle and then retighten the retaining bolt.

**NOTE: Air pressure must be released from the actuator in order to use the manual override.**

### TECHNICAL DATA

Model	Gear Ratio	Input Torque NM	Output Torque NM	Handwheel Dia	Weight kg
XLHJ26	26:1	60	550	Φ200	
XLHJ38	38:1	75	620	Φ200	13
		90	700		
XLHJ54	54:1	100	1000	Φ300	17
		120	1200		
XLHJ80	80:1	110	1600	Φ400	22
		140	2000		
XLHJ78A	78:1			Φ600	
XLHJ98	98:1			Φ800	
XLHJ100	100:1			Φ800	
XLHJ118	118:1			Φ1000	

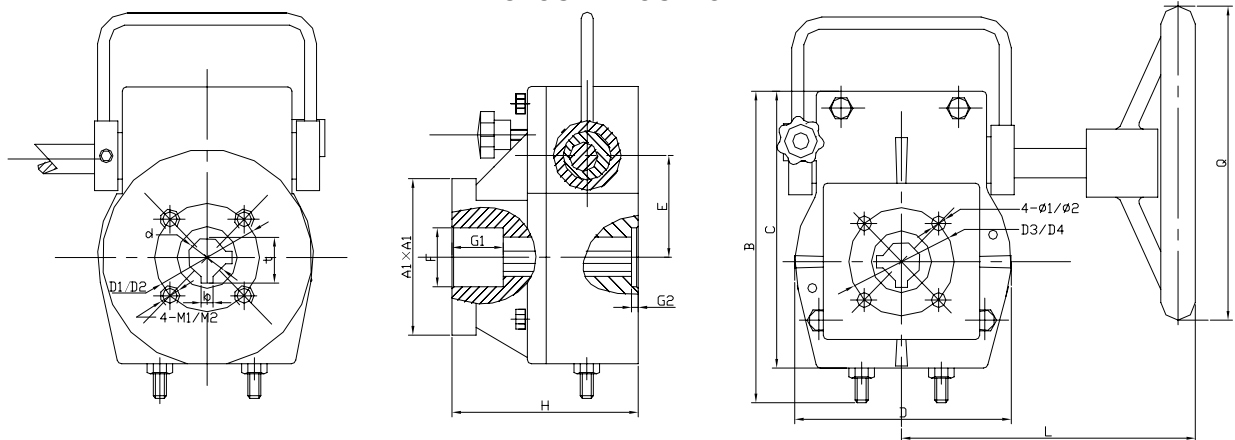
### MAIN PARTS LISTING



No.	Description	Qty	Material
1	Off-Center Sleeve Sub Assembly	1	
2	Positioning Pin Sub Assembly	1	
3	Hand Wheel	1	HT200 GB9439-88
4	Worm Shaft	1	45 GB699-88
5	Handle	1	
6	Worm	1	45 GB699-88
7	Worm Gear	1	QT500-7 GB1348-88
8	Body	1	HT200 GB9439-88
9	Bracket Cap	1	HT200 GB9439-88

### DIMENSIONS

#### CLOSED POSITION



Model	d	b	t	D1	4-M1	D2	4-M2	Ax1	D3	4-φ1	D4	4-φ2	H	Q	L	B	C	D	E	F	G1	G2
XLHJ26:1	22	6	25.4	70	4-M8			70x70	70		70		99	φ200	160	162	142	109	50.5	36	26	2
XLHJ38:1	26	8	29.3	70	4-M8	102	4-M10	100X100	70	4-φ9	102	4-φ12	117	φ200	195	198	178	143	65	40	34	4
	38	10	41.3					110X100												60		
XLHJ54:1	38	10	41.3	125	4-M12	140	4-M16	130X130	125	4-φ14	140	4-φ18	118	φ300	205	235	215	183	85	70	30	4
	48	14	51.8																	70		
XLHJ80:1	48	14	51.8	140	4-M16	165	4-M20	156X156	140	4-φ18	165	4-φ22	148	φ400	245	320	298	250	124	85	46	2
	60	18	64.4																			2
XLHJ78A	60	18	64.4	165	4-M20	165	4-M20	223X223	165	4-φ22			150	φ600	360	360	340	285	142	110	44	1.5
	80	18	84.4								1											
XLHJ98:1	80	18	84.4	165	4-M20			230X230	165	4-φ22			195	φ800	550	550	530	450	229	110	40	3
XLHJ100:1	100	20	105.3	254	8-M16			300X300	254				195	φ800	605	605	585	520	258	140	42	3
XLHJ118:1	120	32	129	356	8-M30			φ445	356				250	φ1000	900	900	870	800	391	200	61	4